

WHAT IS CLAIMED IS:

1. A storage network, comprising:
multiple SCSI controllers;
5 an expander device coupled to each controller;
at least one bridge device, wherein each bridge device is coupled to a plurality of
expander devices; and
at least one Serial ATA drive, wherein each Serial ATA drive is coupled to an output
port of the bridge device.

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2. The storage network of claim 1, wherein the bridge device is operable to translate
serial data communications from the Serial Attached SCSI protocol to the Serial ATA protocol.

3. The storage network of claim 2, wherein the serial data communications in the Serial
15 Attached SCSI protocol include serial data formatted according to the Serial ATA Tunneling
protocol.

4. The storage network of claim 2, wherein each bridge device is operable to arbitrate
between data streams such that the Serial ATA drive coupled to the bridge drive receives, at any one
20 time, only one data stream.

5. The storage network of claim 2, wherein each bridge device is operable to route
communications from the Serial ATA drive to an expander device that is associated with the SCSI
controller to whom the communication from the Serial ATA drive is directed.

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6. The storage network of claim 2,
wherein the serial data communications in the Serial Attached SCSI protocol include
serial data formatted according to the Serial ATA Tunneling protocol; and

wherein each bridge device is operable to arbitrate between data streams such that the
5 Serial ATA drive coupled to the bridge drive receives, at any one time, only one data stream.

7. The storage network of claim 2,
wherein the serial data communications in the Serial Attached SCSI protocol include
serial data formatted according to the Serial ATA Tunneling protocol;

10 wherein each bridge device is operable to arbitrate between data streams such that the
Serial ATA drive coupled to the bridge drive receives, at any one time, only one data stream;

wherein each bridge device is operable to arbitrate between data streams such that the
Serial ATA drive coupled to the bridge drive receives, at any one time, only one data stream; and

15 wherein each bridge device is operable to route communications from the Serial ATA
drive to an expander device that is associated with the SCSI controller to whom the communication
from the Serial ATA drive is directed.

8. The storage network of claim 1, wherein each bridge device is associated with a
single Serial ATA drive.

9. A method for translating data directed data to a Serial ATA drive in a Serial Attached SCSI storage network, comprising the steps of:

providing a bridge device interposed at the input port of the serial ATA drive, the bridge device comprising:

5 a plurality of input ports coupled to other elements of the storage network and operable to receive data in Serial Attached SCSI protocol;

a translation node operable to translate the data from the Serial Attached SCSI protocol to the Serial ATA protocol; and

an output port coupled to the Serial ATA drive.

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10. The method for translating data directed to a Serial ATA drive in a Serial Attached SCSI network of claim 9, wherein the data in the Serial Attached SCSI protocol is transmitted in the Serial ATA Tunneling Protocol.

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11. The method for translating data directed to a Serial ATA drive in a Serial Attached SCSI network of claim 9, wherein the bridge device is coupled between multiple expander devices and a Serial ATA drive such that each input port is coupled to an expander device.

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12. The method for translating data directed to a Serial ATA drive in a Serial Attached SCSI network of claim 11, wherein the provided bridge devices further comprises a arbiter node operable to manage the flow of data in the Serial Attached SCSI protocol to the translation node.

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13. The method for translating data directed to a Serial ATA drive in a Serial Attached SCSI network of claim 11, wherein the arbiter node is operable to route communications from the Serial ATA drive coupled to the output node of the bridge device to an expander device associated with to SCSI controller to whom the communication is directed.

14. A bridge device for coupling elements of a Serial Attached SCSI network to a Serial ATA drive, comprising:

multiple input ports, each operable to receive communications routed through separate expander devices;

5 an output port coupled to a Serial ATA drive; and

and a translation node operable to translate serial data in the Serial Attached SCSI protocol to serial data in the Serial ATA protocol.

15. The bridge device of claim 14, wherein the bridge device is associated with a single
10 Serial ATA drive.

16. The bridge device of claim 15,
wherein the bridge device is coupled to at least two expander devices; and
wherein each expander device is associated with a single SCSI controller.

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17. The bridge device of claim 16, further comprising an arbiter for managing flow of data from each of the input ports such that only a single stream of serial data is being translated at any one time at the translation node.

20 18. The bridge device of claim 16, further comprising an arbiter for managing the flow of serial data from the Serial ATA drive such that data is directed from the translation node to an input port associated with an expander device that is operable to route the serial data to the SCSI controller to whom the serial data is directed.

19. The bridge device of claim 16, further comprising an arbiter operable to,
manage the flow of data from each of the input ports such that only a single stream
of serial data is being translated at any one time at the translation node; and

5 manage the flow of serial data from the Serial ATA drive such that data is directed
from the translation node to an input port associated with an expander device that is operable to route
the serial data to the SCSI controller to whom the serial data is directed.

20. The bridge device of claim 14, wherein the translation node is operable to translate
data in the Serial ATA Tunneling Protocol.